

# UTILITY PATENT APPLICATION TRANSMITTAL

(Only for new nonprovisional applications under 37 CFR 1.53(b))

Attorney Docket No. 1083.1076/JDH

First Named Inventor or Application Identifier:

Tomohito SHIDA

Express Mail Label No.

**APPLICATION ELEMENTS**

See MPEP chapter 600 concerning utility patent application contents.

ADDRESS TO: **Assistant Commissioner for Patents  
Box Patent Application  
Washington, DC 20231**

1. ☒ Fee Transmittal Form
2. ☒ Specification, Claims & Abstract ..... [ Total Pages: 37 ]
3. ☒ Drawing(s) (35 USC 113) ..... [ Total Sheets: 12 ]
4. ☒ Oath or Declaration ..... [ Total Pages: 3 ]
  - a. ☒ Newly executed (original or copy)
  - b. ☐ Copy from a prior application (37 CFR 1.63(d)) (for continuation/divisional with Box 17 completed)
    - i. ☐ **DELETION OF INVENTOR(S)**  
Signed statement attached deleting inventor(s) named in the prior application, see 37 CFR 1.63(d)(2) and 1.33(b).
5. ☐ Incorporation by Reference (usable if Box 4b is checked)  
The entire disclosure of the prior application, from which a copy of the oath or declaration is supplied under Box 4b, is considered as being part of the disclosure of the accompanying application and is hereby incorporated by reference therein.
6. ☐ Microfiche Computer Program (Appendix)
7. ☐ Nucleotide and/or Amino Acid Sequence Submission (if applicable, all necessary)
  - a. ☐ Computer Readable Copy
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  - c. ☐ Statement verifying identity of above copies

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**ACCOMPANYING APPLICATION PARTS**

8. ☒ Assignment Papers (cover sheet & document(s))
9. ☐ 37 CFR 3.73(b) Statement (when there is an assignee) [ ] Power of Attorney
10. ☐ English Translation Document (if applicable)
11. ☐ Information Disclosure Statement (IDS)/PTO-1449 [ ] Copies of IDS Citations
12. ☐ Preliminary Amendment
13. ☒ Return Receipt Postcard (MPEP 503) (Should be specifically itemized)
14. ☐ Small Entity Statement(s) [ ] Statement filed in prior application, status still proper and desired.
15. ☒ Certified Copy of Priority Document(s) (if foreign priority is claimed)
16. ☐ Other:

**17. If a CONTINUING APPLICATION, check appropriate box and supply the requisite information:**[ ] Continuation [ ] Divisional [ ] Continuation-in-part (CIP) of prior application No:        /       **18. CORRESPONDENCE ADDRESS**

21171

PATENT TRADEMARK OFFICE

Staas &amp; Halsey

# NEW APPLICATION FEE TRANSMITTAL

Attorney Docket No.	1083..1076/JDH
Application Number	TO BE ASSIGNED
Filing Date	October 23, 2000
First Named Inventor	Tomohito SHIDA

AMOUNT ENCLOSED	\$1070.00
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## FEE CALCULATION (fees effective 12/29/99)

CLAIMS	(1) FOR	(2) NUMBER FILED	(3) NUMBER EXTRA	(4) RATE	(5) CALCULATIONS
TOTAL CLAIMS		12 - 20 =	0	X \$ 18.00 =	\$ 0.00
INDEPENDENT CLAIMS		7 - 3 =	4	X \$ 80.00 =	320.00
MULTIPLE DEPENDENT CLAIMS (any number; if applicable)				+ \$260.00 =	0.00
<b>BASIC FILING FEE</b>					710.00
Total of above Calculations =				\$	1030.00
Surcharge for late filing fee, Statement or Power of Attorney (\$130.00)					0.00
Reduction by 50% for filing by small entity (37 CFR 1.9, 1.27 & 1.28).				-	0.00
<b>TOTAL FILING FEE =</b>				\$	1030.00
Surcharge for filing non-English language application (\$130.00; 37 CFR 1.52(d))					0.00
Recordation of Assignment (\$40.00; 37 CFR 1.21(h)(1))					40.00
<b>TOTAL FEES DUE =</b>				\$	1070.00

## METHOD OF PAYMENT

- ☒ Check enclosed as payment.
- ☐ Charge "TOTAL FEES DUE" to the Deposit Account No., below.
- ☐ No payment is enclosed and no charges to the Deposit Account are authorized at this time.

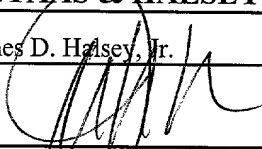
## GENERAL AUTHORIZATION

- ☒ If the above-noted "AMOUNT ENCLOSED" is not correct, the Commissioner is hereby authorized to credit any overpayment or charge any additional fees necessary to:

Deposit Account No.	19-3935
Deposit Account Name	STAAS & HALSEY LLP

- ☒ The Commissioner is also authorized to credit any overpayments or charge any additional fees required under 37 CFR 1.16 (filing fees) or 37 CFR 1.17 (processing fees) during the prosecution of this application, including any related application(s) claiming benefit hereof pursuant to 35 USC § 120 (e.g., continuations/divisionals/CIPs under 37 CFR 1.53(b) and/or continuations/divisionals/CPAs under 37 CFR 1.53(d)) to maintain pendency hereof or of any such related application.

**SUBMITTED BY: STAAS & HALSEY LLP**

Typed Name	James D. Halsey, Jr.	Reg. No.	22,729
Signature		Date	October 23, 2000

## TITLE OF THE INVENTION

Method, system, and  
apparatus for accepting transaction reservation,  
and recording medium

5

## BACKGROUND OF THE INVENTION

The present invention relates to a method for accepting transaction reservation, in which charges to offer products or services are presented on a network, and reservation to pay the above charges for the products or the services is accepted; a system and an apparatus for accepting transaction reservation to execute the above method; and to a recording medium to store computer programs which cause a computer to function as the above apparatus.

10  
15 In a shop to offer various kinds of products and services, there have been a time zone (hereinafter, called as a quiet time zone) when only a few customers visit there, according to characters of the products or services which are handled there. There may be quiet time zones between breakfast and lunch, and between lunch and supper, for example, in a shop such as a restaurant to offer dishes. On the other hand, a shop such as a supermarket may have quiet time zones during lunch, supper and the like.

20  
25 However, it may be preferable to shorten such quiet time zone as much as possible in order to efficiently offer

the products or services. Then, there have conventionally been a sale time zone when the products and services are sold at discount prices lower than usual ones in order to shorten the above quiet time zone.

5           For example, in a shop such as a supermarket, products which should be sold on that day, and left unsold just before the end of business hours have been generally offered as a bargain at a discount price. Thereby, it has been realized to reduce the number of products left unsold to the  
10           minimum.

          In each shop, there have been performed operations to exchange price tags, price tables, and so on showing usual charges to ones with discount charges to offer such time-limited services and bargain products (hereinafter, called  
15           as discount services). And, there have been calling customers in, handing out leaflets, and so on, in front of the shop to advertise that the products or services are offered at discount charges.

          However, it is difficult to promptly perform the above  
20           exchanging of price tags, price tables, and so on, calling and handing out of leaflets in front of the shop, as they have required much hard labor. Therefore, there have been a problem that it is impossible to change discount charges defined at discount sales into appropriate ones according to  
25           momentarily changing conditions.



the discount service; a system and apparatus for accepting transaction reservation to execute the above method; and a recording medium to store computer programs which make a computer function as the above apparatus.

5           Another object of the present invention is to provide a method for accepting transaction reservation to define appropriate terms according to momentarily changing conditions, by definition of terms for transaction such as a discount rate in a discount service, based on reservation  
10           states for the transaction; a system and an apparatus for accepting transaction reservation, and a recording medium for them.

          Further another object of the present invention is to provide a method for accepting transaction reservation, in  
15           the case of execution of transaction based on specific terms, to perform transaction based on the specific terms only when it is confirmed that the transaction reservation has been actually made, after checking whether the reservation has been made or not; a system and an apparatus  
20           for accepting transaction reservation; and a recording medium for them.

          Still another object of the present invention is to provide a method for accepting transaction reservation, in  
25           the case of confirmation that transaction reservation has been made based on specific terms, to offer favors according

to the above terms instead of performing transactions based on the above terms; a system and an apparatus for accepting transaction reservation; and a recording medium for them.

5 The method according to a first invention is characterized in that a method for accepting transaction reservation, comprising the steps of: electronically presenting information on transaction favors of a transaction target defined for each time zone to a plurality of customers; electronically accepting information on transaction reservation at a selected time zone by a customer; and performing a transaction with favors for the reserved transaction target, when the visiting time of a customer to a shop, or the finish time of the transaction is included in the time zone in association with said accepted information on transaction reservation.

10 The method according to a second invention is characterized in that a method for accepting transaction reservation of a transaction target, comprising the steps of: determining terms for a transaction of a transaction; displaying the determined terms for the transaction ; and accepting reservation of transaction of the transaction target based on the displayed terms.

20 The method according to a third invention is characterized in that, in the method according to a second invention, the step of determining the terms for a

transaction is a step of determining terms for a transaction based on the state of the transaction reservation.

The method according to a fourth invention is characterized in that, in the method according to the second  
5 or third invention, the accepting step further comprises a step of confirming whether the reservation has been accepted.

The method according to a fifth invention is characterized in that, a reception method for deal booking  
10 according to claim 4, characterized in that it further comprises the following steps: a method according to claim 4, further comprising the steps of: determining favors for the reserved transaction which has been confirmed to be accepted by the confirmation step, based on its terms; and  
15 offering the determined favors.

The system according to a sixth invention is characterized that, a system for accepting transaction reservation provided with a plurality of terminal devices, and an apparatus for accepting transaction reservation,  
20 connected to the terminal devices respectively, to accept reservation for a transaction of a transaction target, characterized in that said accepting apparatus comprises:  
(i) a terms determination means for determining terms for a transaction of a transaction target; and (ii) a transaction  
25 terms display means for displaying the terms for the



transaction determined by the terms determinations means;  
said terminal devices comprises: (i) an accepting means for  
accepting reservation application data which represents  
reservation application for a transaction of a transaction  
5 target based on the displayed terms; and (ii) a transmission  
means for transmitting the reservation application data  
accepted by the accepting means to the accepting apparatus;  
and said accepting apparatus further comprises a storage  
means for storing received reservation application data,  
10 when the reservation application data is received.

The apparatus for accepting transaction reservation to accept reservation application for a transaction of a transaction target, according to a seventh invention is comprising: a terms determination means for determining terms for a transaction of a transaction target; a transaction terms display means for displaying the determined terms for the transaction by the terms determination means; and a storage means for storing the reservation application data which represents reservation application for a transaction of a transaction target based on the transaction terms displayed by the terms display means, when the reservation application data is input.

The recording medium according to a eighth invention is characterized that, a computer-readable recording medium  
25 storing programs to make a computer accept reservation



products are offered.

Customers may perform transaction reservation without a geographic restriction by electronic accepting of information on transaction reservation, and receive the  
5 favors shown in information on transaction favors, by performing deals based on the above booking.

Here, the finish time of the transaction means the purchase time in the case of purchasing products at the shop, or time to receive services in the case of receiving  
10 offered service.

In the second, sixth, and seventh inventions, terms for reserved transaction target are defined and displayed. Then, reservation to perform transaction of a transaction target is accepted, based on the above displayed terms.

15 Thus, a lot of customers may promptly have information, by disclosure of defined terms for transactions, that special services are offered.

It may be possible to predict, by accepting reservation to perform transaction based on the above terms for  
20 transaction, to what degree of transactions based on the terms are actually performed. Thereby, they in a shop may obtain information to what degree of products should be prepared.

In the third invention, terms for transaction are  
25 defined based on reservation states for transaction.

Appropriate terms for transactions may be defined,  
corresponding to conditions momentarily changing as time has  
elapsed.

In the fourth invention, it is confirmed whether  
5 reservation for the transaction has been actually performed,  
in performing transaction reserved based on the terms.

Thereby, as for special services such as special prices  
at a sale time zone and bargain products, only customers who  
have reserved to receive the above services may receive the  
10 above services, and other customers may not enjoy the above  
services. Therefore, customers may be promoted to reserve  
to receive such special services, in order to receive them.

In the fifth invention, after confirming that  
transaction reservation has been performed based on specific  
15 terms for transaction, favors corresponding to the above  
terms may be offered to customers.

Thus, favors corresponding to the above terms for  
transaction, points, for example, having monetary values are  
given to the customer who has come to a shop after  
20 reservation, instead of performing transactions based on  
specific terms for transactions. Thereby, as there is no  
apparent sign that special services based on specific terms  
for transaction are offered, customers who have come to the  
shop without reservation have no feeling that they are  
25 suffered from any feeling of loss.

The above and further objects and features of the invention will be more fully be apparent from the following detailed description with accompanying drawings.

5 BRIEF DESCRIPTION OF THE SEVERAL VIEWS OF THE DRAWING

FIG. 1 shows a block diagram of a configuration of a system for accepting transaction reservation according to embodiment 1 of the present invention;

10 FIG. 2 shows a block diagram of a configuration of an apparatus for accepting transaction reservation according to embodiment 1 of the present invention;

FIG. 3 shows a conceptual diagram of a format example of a file stored in a bargain data base (DB);

15 FIGS. 4A through 4D show conceptual diagrams of format examples of a table stored in a basic data DB;

FIG. 5 shows a conceptual diagram of a format example of a file stored in a reservation data DB;

20 FIG. 6 shows a flow chart of an operation flow of a system for accepting transaction reservation according to embodiment 1 of the present invention at registration processing of bargain data, or basic data;

25 FIG. 7 shows a flow chart of an operation flow of an apparatus for accepting transaction reservation according to embodiment 1 of the present invention at display of bargain data;

FIG. 8 shows a flow chart of an operation flow of a system for accepting transaction reservation according to embodiment 1 of the present invention at accepting reservation;

5        FIG. 9 shows a flow chart of an operation flow of a system for accepting transaction reservation according to embodiment 1 of the present invention at confirmation of reservation;

10        FIG. 10 shows a block diagram of a configuration of an apparatus for accepting transaction reservation according to embodiment 2 of the present invention;

FIG. 11 shows a conceptual diagram of a format example of a file stored in a favored point DB; and

15        FIG. 12 shows a flow chart of an operation flow of a system for accepting transaction reservation according to embodiment 2 of the present invention at confirmation of booking.

## DETAILED DESCRIPTION OF THE INVENTION

20        (Embodiment 1)

FIG. 1 shows a block diagram of a configuration of the system for accepting transaction reservation according to embodiment 1 of the present invention. In FIG. numerals 1, 1, 1 ... show terminal devices, which are provided in  
25        customer's home 10 and office 11, and a shop 12. In the

customer's home 10 and office 11, confirmation of the contents of services which are offered at each shop, and reservation are performed by the customer through the terminal devices 1, 1 ... . When the terminal devices 1, 1 ... are portable devices such as portable telephones, it may be possible for the customer to perform the confirmation of the contents of services, and the reservation of them at any required time and at any necessary place.

In the shop 12, registration of service contents and basic data for definition of the service contents, confirmation of reservation contents, and so on are performed by employees of the shop 12 through the terminal devices 1, 1 ....

An apparatus for accepting transaction reservation 2 for performing communications with the terminal devices 1, 1 ... is connected to a network 3, and provided in, for example, a machine center 13 managed by a plurality of shops. The accepting apparatus 2 is not limited to the above provision and may be also installed in the shop, or may be consigned to a service provider, and so on.

FIG. 2 shows a block diagram of a configuration of the apparatus for transaction reservation 2 according to embodiment 1 of the present invention. In FIG. 2, the accepting apparatus 2 for transaction reservation has a CPU 21, to which a RAM 22 to store data generated in the above





below. A first data base, that is, the bargain data DB 240 stores bargain data (i.e. service data) on special services at a specified time zone such as a sale time zone. The above bargain data is received from the terminal devices 1, 1 ... according to the procedure described below.

FIG. 3 shows a conceptual diagram of a format example of a file stored in the bargain data DB 240. As shown in FIG. 3, five fields, that is, a shop ID field 40a, a date field 40b, a time field 40c, and a field for bargain target 40d, and a discount rate field 40e are provided in the bargain data DB 240.

A shop identifier (hereinafter, called as a shop ID) to identify the shop, a date when services offered by the shop are performed, and time when the services are performed are stored in the shop ID field 40a, the date field 40b, and time field 40c, respectively.

And, product names of target products for special services, and discount rates applied to the above products are stored in the field of bargain target 40d, and the discount rate field 40e, respectively. Moreover, the above discount rate is calculated according to the procedure described below.

The format example shown in FIG. 3 denotes that, for example, in a shop with a shop ID "A", all the products dealt in the shop are uniformly discounted at 10% in their

prices between 9 a.m. and 11 a.m. on November 10, 1999.

A second data base, that is, the basic data DB 241 stores a various kinds of data (hereinafter, called as basic data), which are used for calculation of the above discount rate, in a form of a table. The above basic data are received from the terminal devices 1, 1 ..., according to the procedure described below.

FIG. 4 shows a conceptual diagram of a format example of a table stored in the basic data DB 241. FIG. 4A shows a table with a target number of persons coming to a shop and a prospective number of the persons, in which the target number of persons coming to the shop and the prospective number of the persons at each time zone are defined and stored. FIGS. 4B and 4C show a day-of-week coefficient table and a weather coefficient table, respectively. The above coefficients are defined for each day-of-week and each weather, according to the prospective number of persons coming to the shop, and stored in the above tables, respectively. Moreover, FIG. 4D shows a discount rate table which stores discount rates corresponding to reservation rates calculated according to the procedure described below.

The table stored in the basic data DB 241 is not limited to the above table, and for example, a table including coefficients defined according to prospective number of persons coming to the shop for each month or each

temperature may be stored. Moreover, the above tables are prepared and stored in each shop.

A third database, that is, the reservation data DB 242 stores reservation data on the reservation accepted from each customer. And the above reservation data is received from the terminal devices 1, 1 ... according to the procedure described later.

FIG. 5 shows a conceptual diagram of a format example of a file stored in a reservation data DB 242. As shown in FIG. 5, five fields, that is, a customer ID field 42a, a shop ID field 42b, a date and time field 42c, and a reservation data field 42d, and a reservation ID field 42e are provided in the reservation data DB 242.

A customer identifier (hereinafter, called as a customer ID) to identify each customer and a shop ID for each shop are stored in the customer ID field 42a and the shop ID field 42b, respectively. Moreover, a date and time when the reservation has been accepted, data showing the contents of the reservation, and a reservation identifier (hereinafter, called as a reservation ID) to identify the reservation are stored in the date and time field 42c, the reservation data field 42d, and the reservation ID field 42e, respectively.

The format example shown in FIG. 5 denotes that, for example, at 10 a.m. on November 10, 1999, a customer with a

customer ID of 123456" has reserved a discount service that all the products in a shop with a shop ID of "A" will be sold at a discount rate of 10%, and the reservation ID is "1".

5           For example, in a shop having a membership system, an identifier for each member is used for a customer ID stored in the customer ID field 42a, and in a shop without such membership system, a name of each customer, and so on are used.

10           Then, the operation of the system for accepting transaction reservation of the embodiment of the present invention will be described.

FIG. 6 shows a flow chart of an operation flow of a system for accepting transaction reservation according to the embodiment 1 of the present invention at registration processing of bargain data, or basic data.

15           The terminal devices 1, 1 ... display a screen for promotion to input the bargain data (or, basic data) on the devices themselves. Employees of each shop, and so on input the bargain data (or, basic data) with respect to the screen.

20           When the bargain data (or, basic data) is received (S101), the terminal devices 1, 1 ... transmit received bargain data (or, basic data) to the apparatus for accepting transaction reservation 2 (S102).



shop, that is, prospective number of customers coming to a shop without reservation (S301). The above calculation is performed with the product of the target number of persons coming to a shop shown in FIG. 4A, the prospective number of persons coming to a shop stored in the table with the prospective number of persons coming to the shop, the coefficients stored in the day-of-week coefficient table shown in FIG. 4B, and coefficients stored in the weather coefficient table shown in FIG. 4C. According to the calculation example, for example, the prospective number of persons coming to a shop without reservation at 10 a.m. on a rainy Saturday is calculated by the product of 50 (persons) for a prospective number of persons coming to a shop at 10 a.m., 80(%) for a weather coefficient on a rainy day, and 120(%) for a day-of-week coefficient on a Saturday to obtain 48 (persons).

Then, a reservation rate of the reservation which each customer has performed is calculated (S302) as described below, based on the prospective number of persons coming to the shop without reservation, which has been calculated at the step S301. The above calculation is performed by division of, for example, the reservation number showing cumulative number of reservation by a value obtained through subtraction of the above prospective number of persons coming to the shop without reservation from the target



the apparatus for accepting transaction reservation 2 stores the received discount rate to the discount rate field 40e of the bargain data DB 240 and displays it.

5 The above processing may be also executed when display of the bargain data is required from the terminal devices 1, 1 ... of customers. Moreover, after the steps S301 through S304 are executed at a regular interval, the step S305 may be configured to be executed when display of the bargain data is required from the terminal devices 1, 1 ... of  
10 customers.

FIG. 8 shows a flow chart of an operation flow of the system for accepting transaction reservation according to embodiment 1 of the present invention at accepting reservation.

15 The terminal devices 1, 1 ... display a screen for promotion to input the reservation application date showing the application of the reservation on the devices themselves. Each customer inputs the reservation application data with the devices.

20 When the reservation application data is received (S401), the terminal devices 1, 1 ... send the received reservation application data to the apparatus for accepting transaction reservation 2 (S402).

25 The apparatus for accepting transaction reservation 2 registers the received reservation application data in the



reservation data DB 242 (S502), when the reservation  
 application data is received from the terminal devices 1, 1  
 ... (S501), and transmits registration-completion data,  
 denoting that the registration to the reservation data DB  
 5 242 has been completed, to the terminal devices 1, 1 ...  
 (S503). The registration-completion data includes a  
 reservation ID numbered at registration to the reservation  
 data DB 242.

The devices 1, 1 ... display the received  
 10 registration-completion information on the display screen of  
 the devices themselves (S404), when the  
 registration-completion data is received from the apparatus  
 for accepting transaction reservation 2 (S403).

The above reservation ID may be numerals, bar codes,  
 15 and the like. In the case of numerals for the reservation  
 ID, the customer tells the reservation ID to a cashier by  
 verbal communication at payment, after writing down the ID  
 on a sheet of paper to bring it to the shop. In another  
 embodiment, the numerals or the bar codes and so on for the  
 20 reservation ID may be printed with a printer, and the  
 customer may bring the printed one to the shop. In the  
 above case, the reservation ID may be confirmed on the  
 terminal devices 1, 1 ... of the shop, using an optical  
 character reader (OCR) or a bar code reader. Moreover, the  
 25 terminal devices 1, 1 ... may not be special devices for

transaction reservation, but maybe a POS (point of sales) terminal.

In addition, the reservation ID may be stored in a memory device of a portable telephone, and brought to a shop  
5 to confirm the reservation ID by communication between the terminal devices 1, 1 ... of the shop and the portable telephone.

Further, in a shop having a membership system, the presence of the reservation may be confirmed, using a number  
10 of member in stead of the reservation ID. In the above case, the confirmation of the reservation ID may be confirmed by collation between the customer ID stored in the customer ID field 42a of the reservation data DB 242 and the member number written on a member card, when the member card  
15 is read at payment.

Thereby, each customer may perform application of desired reservation, and, as there is a case to change the above reservation rate and the discount rate according to the reservation application, the apparatus for accepting  
20 transaction reservation 2 updates the bargain data DB 240 according to the above procedure, in the above case, and then discloses new bargain data on the network 3.

Each customer goes out to each shop at reserved time to tell the reservation ID at the shop. Then, the reservation  
25 may be confirmed according to a procedure described below.

FIG. 9 shows a flow chart of an operation flow of the system for accepting transaction reservation according to embodiment 1 of the present invention at confirmation of reservation.

5           In each shop, the employees and so on input reservation confirmation data including the above reservation ID to the terminal devices 1, 1 ... in order to confirm the reservation, when the reservation ID is told. The terminal devices 1, 1 ... transmit the accepted reservation  
10 confirmation data to the apparatus for accepting transaction reservation 2 (S602), when the reservation confirmation data is accepted (S601).

          When the apparatus for accepting transaction reservation 2 receives the reservation confirmation data  
15 from the terminal devices 1, 1 ... (S701), referring to the reservation data DB 242 (S702), the reservation ID included in the reservation confirmation data is retrieved as a key (S703). In the case of failure in the retrieval (NO at the step S703), the confirmation failure data showing that the  
20 reservation confirmation has not been performed is transmitted to the terminal devices 1, 1 ... (S704).

          The devices 1, 1 ... display the received confirmation failure data on the display screen of the devices themselves (S604), when the confirmation failure data is received from  
25 the apparatus for accepting transaction reservation 2



reservation according to the present invention is performed by a service provider and so on as an agent, the service provider may claim the agency service charge from the side (a shop and so on) asking the services. In the above case, the claimed charge may be set as a constant amount, or it may be calculated based on the amount for the transaction, when the transaction in association with the reservation is actually performed.

(Embodiment 2)

FIG. 10 shows a block diagram of a configuration of the apparatus for accepting transaction reservation according to embodiment 2 of the present invention.

In the apparatus for accepting transaction reservation 2 according to embodiment 2 of the present invention, a fourth data base, that is, a favored point DB 243 is added to the hard disk 24, different from the apparatus for accepting transaction reservation 2 according to embodiment 1 of the present invention. The programs in the apparatus for accepting transaction reservation 2 according to embodiment 2 of the present invention are stored in a portable recording medium 300. Moreover, the programs are stored in a recording medium 5 installed in an external server computer 4, and they may be downloaded. As the configurations, other than the above, are similar to those previously described with reference to embodiment 1, they

are denoted by the same reference numerals, and the description will be eliminated.

FIG. 11 shows a conceptual diagram of a format example of a file stored in the above fourth data base, that is, a favored point DB 243.

As shown in FIG. 11, the favored point DB 243 has three fields, that is, a customer ID field 43a, a shop ID field 43b, and a point field 43c.

The customer ID field 43a, the shop ID field 43b, and the point field 43c, respectively, store a customer ID to identify each customer, a shop ID of each shop, and points corresponding to monetary values, with which, for example, a product with a value of ¥1 may be purchased by one point.

For example, the format example shown in FIG. 11 denotes that 500 points, which may be used in a shop with a shop ID of "A", are given to a customer with a customer ID of "123456".

Now, operation of the system for accepting transaction reservation according to embodiment 2 of the present invention will be described. But, the registration of the bargain data and basic data, the display of the bargain data, and the operation at each processing for accepting the reservation are similar to those of embodiment 1 to eliminate the description.

FIG. 12 shows a flow chart of an operation flow of the

system for accepting transaction reservation according to  
embodiment 2 of the present invention at confirmation of  
reservation. Processing similar to that in embodiment 1 is  
denoted by the same reference numerals, and its description  
5 will be eliminated.

In the case of the success in the retrieval of the  
reservation data DB 242 at the step S703 (YES at the step  
703), points corresponding to the discount rate for the  
confirmed reservation is calculated (S801). The above  
10 calculation is performed by, for example, making points  
correspond to the charges equivalent to the discounted  
amount. According to the above calculation, the points  
become 500, when the discount rate for a products with a  
price of ¥5,000 is 10%.

15 The favored point DB 243 is updated by storing the  
point calculated as shown above in the point field 43c of  
the favored point DB 243 (S802). And, based on the updated  
contents, data on the newly added points and the cumulative  
points is transmitted to the terminal devices 1, 1 ...  
20 (S803).

The devices 1, 1 ... display the received point data on  
the display screen of the devices themselves (S902), when  
the point data is received from the apparatus for accepting  
transaction reservation 2 (S901).

25 In the present embodiment, the point calculation is

performed when the reserved transaction is performed, but the above calculation may be performed at a predetermined time interval, or every predetermined cumulative number of transactions.

5           As mentioned above, when the reservation is confirmed, customers may obtain points corresponding to the contents of reserved services. Thereby, as there is no apparent sign that special services shown in the bargain data are offered, customers who have come to the shop without reservation have  
10       no feeling that they are suffered from any feeling of loss.

          And, in the case of no execution of the reserved transaction, reduction in the cumulative points by an appropriate points may be performed. In the above case, a fixed point previously determined may be reduced, or the  
15       reduced points may be calculated according to reserved products and services.

          As this invention may be embodied in several forms without departing from the spirit of essential characteristics thereof, the present embodiment is  
20       therefore, illustrative and not restrictive, since the scope of the invention is defined by the appended claims rather than by the description preceding them, and all changes that fall within metes and bounds of the claims, or equivalence of such metes and bounds thereof are therefore intended to  
25       be embraced by the claims.



## CLAIMS

1. A method for accepting transaction reservation, comprising the steps of:

electronically presenting information on transaction favors of a transaction target defined for each time zone to a plurality of customers;

electronically accepting information on transaction reservation at a selected time zone by a customer; and

performing a transaction with favors for the reserved transaction target, when the visiting time of a customer to a shop, or the finish time of the transaction is included in the time zone in association with said accepted information on transaction reservation.

2. A method for accepting transaction reservation of a transaction target, comprising the steps of:

determining terms for a transaction of a transaction; displaying the determined terms for the transaction ; and

accepting reservation of transaction of the transaction target based on the displayed terms.

3. A method according to claim 2, wherein the step of determining the terms for a transaction is a step of determining terms for a transaction based on the state of the transaction reservation.

4. A method according to claim 2, wherein the accepting step further comprises a step of confirming whether the

[illegible][illegible][illegible][illegible][illegible][illegible][illegible][illegible][illegible][illegible]

said accepting apparatus comprises:

(i) a terms determination means for determining terms for a transaction of a transaction target; and

(ii) a transaction terms display means for displaying the terms for the transaction determined by the terms determinations means;

said terminal devices comprises:

(i) an accepting means for accepting reservation application data which represents reservation application for a transaction of a transaction target based on the displayed terms; and

(ii) a transmission means for transmitting the reservation application data accepted by the accepting means to the accepting apparatus; and

said accepting apparatus further comprises a storage means for storing received reservation application data, when the reservation application data is received.

9. An apparatus for accepting transaction reservation to accept reservation application for a transaction of a transaction target, comprising:

a terms determination means for determining terms for a transaction of a transaction target;

a transaction terms display means for displaying the determined terms for the transaction by the terms determination means; and

a storage means for storing the reservation application data which represents reservation application for a transaction of a transaction target based on the transaction terms displayed by the terms display means, when the reservation application data is input.

10. A computer-readable recording medium storing programs to make a computer accept reservation application for a transaction of a transaction target, said programs comprises:

a program code means for causing a computer, to determine terms for a transaction of a transaction target;

a program code means for causing a computer to display the determined terms; and

a program code means for causing a computer to store reservation application data which represents reservation application for a transaction based on the displayed transaction terms, when the reservation application data is input.

11. A system for accepting transaction reservation provided with a plurality of terminal devices, and an apparatus for accepting transaction reservation, connected to the terminal devices respectively, to accept reservation for transaction of a transaction target, characterized in that

said accepting apparatus comprises a storage medium and

a controller coupled to the storage medium, and capable of performing the following operations:

- (i) determining terms for a transaction of a transaction target; and

- (ii) displaying the determined terms for the transaction;

said terminal device comprises a storage medium and a controller coupled to the storage medium, and capable of performing the following operations:

- (i) accepting reservation application data which represents reservation application for a transaction of a transaction target based on the displayed terms; and

- (ii) transmitting the accepted reservation application data to the accepting apparatus; and the controller of said accepting apparatus is further capable of storing the received reservation application data in the storage medium, when the reservation application data is received.

12. An apparatus for accepting transaction reservation to accept reservation application for a transaction of a transaction target, comprising:

- a storage medium; and

- a controller coupled to the storage medium, and capable of performing the following operations:

- determining terms for a transaction of a transaction target;

displaying the terms for the determined transaction;

and

storing the reservation application data which represents reservation application for a transaction of a transaction target based on the displayed transaction terms in the storage medium, when the reservation application data is input.

[illegible]

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FIG. 1

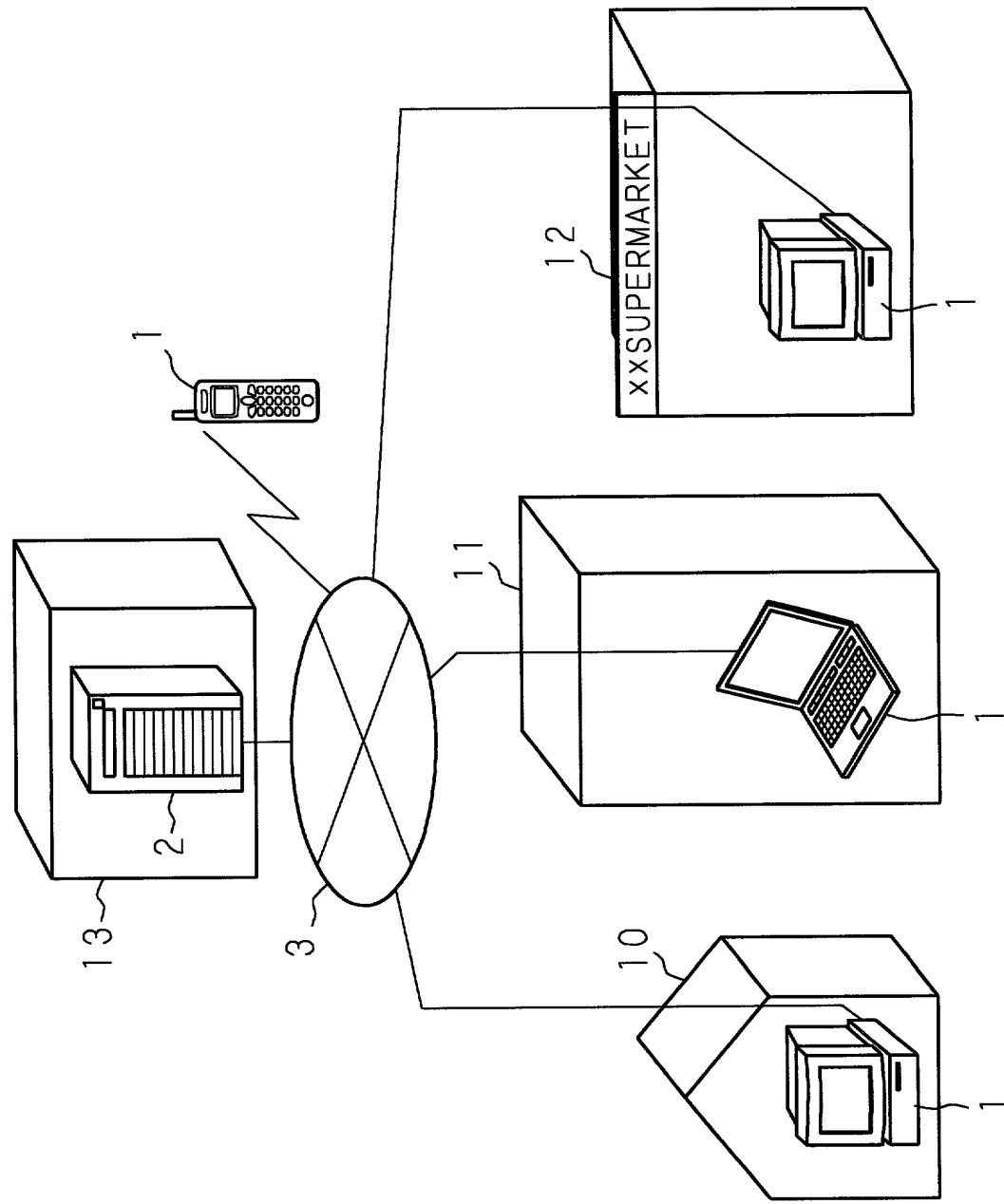




FIG. 2

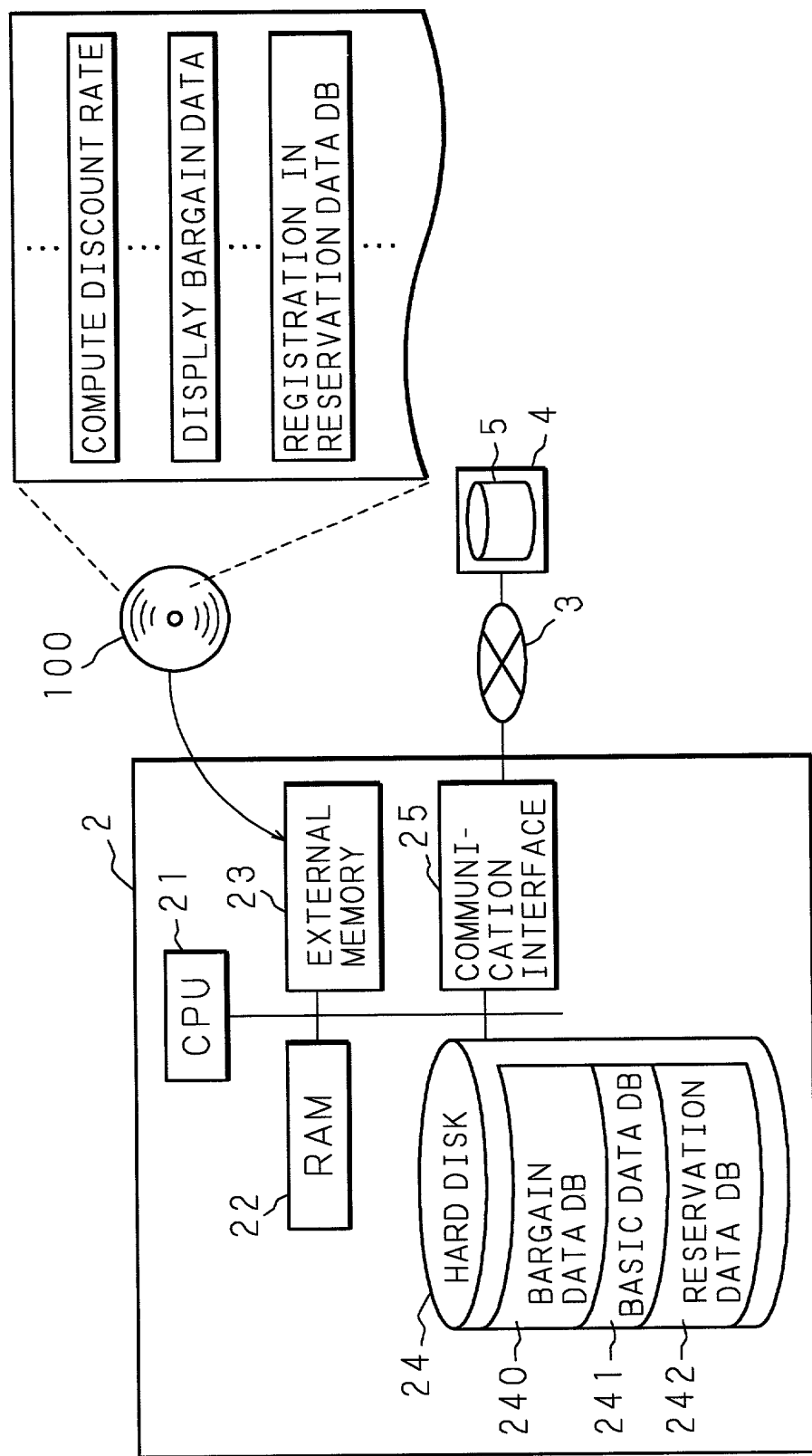


FIG. 3

40a	40b	40c	40d	40e
SHOP ID	DATE	TIME	BARGAIN TARGET	DISCOUNT RATE (%)
A	1999/11/10	9:00~11:00	UNIFORMLY	10
B	1999/11/10	19:00~20:00	ASSORTED SLICED RAW FISH	20
⋮	⋮	⋮	⋮	⋮

FIG. 4 A

TIME	10	11	12	13	14	15	16	17	18	19	20
TARGET NUMBER OF PERSONS	200	200	150	200	200	200	200	200	200	150	200
PROSPECTIVE NUMBER OF PERSONS	50	70	50	70	80	100	150	150	100	60	50

FIG. 4 B

DAY OF WEEK	MON	TUE	WED	THU	FRI	SAT	SUN
COEFFICIENT (%)	60	70	70	70	80	120	150

FIG. 4 C

WEATHER	SUNNY	CLOUDY	RAINY
COEFFICIENT (%)	100	100	80

FIG. 4 D

RESERVATION RATE (%)	0	10	20	30	40	50	60	70	80	90	100
DISCOUNT RATE (%)	40	30	30	30	20	20	20	20	10	10	10

FIG. 5

42a		42b	42c		42d	42e
CUSTOMER ID	SHOP ID	DATE AND TIME	RESERVATION DATA		RESERVATION ID	
123456	A	1999/11/10 10:00	UNIFORM DISCOUNT RATE 10%		1	
333333	B	1999/11/10 19:00	ASSORTED SLICED RAW FISH DISCOUNT RATE 20%		2	
:	:	:	:		:	

FIG. 6

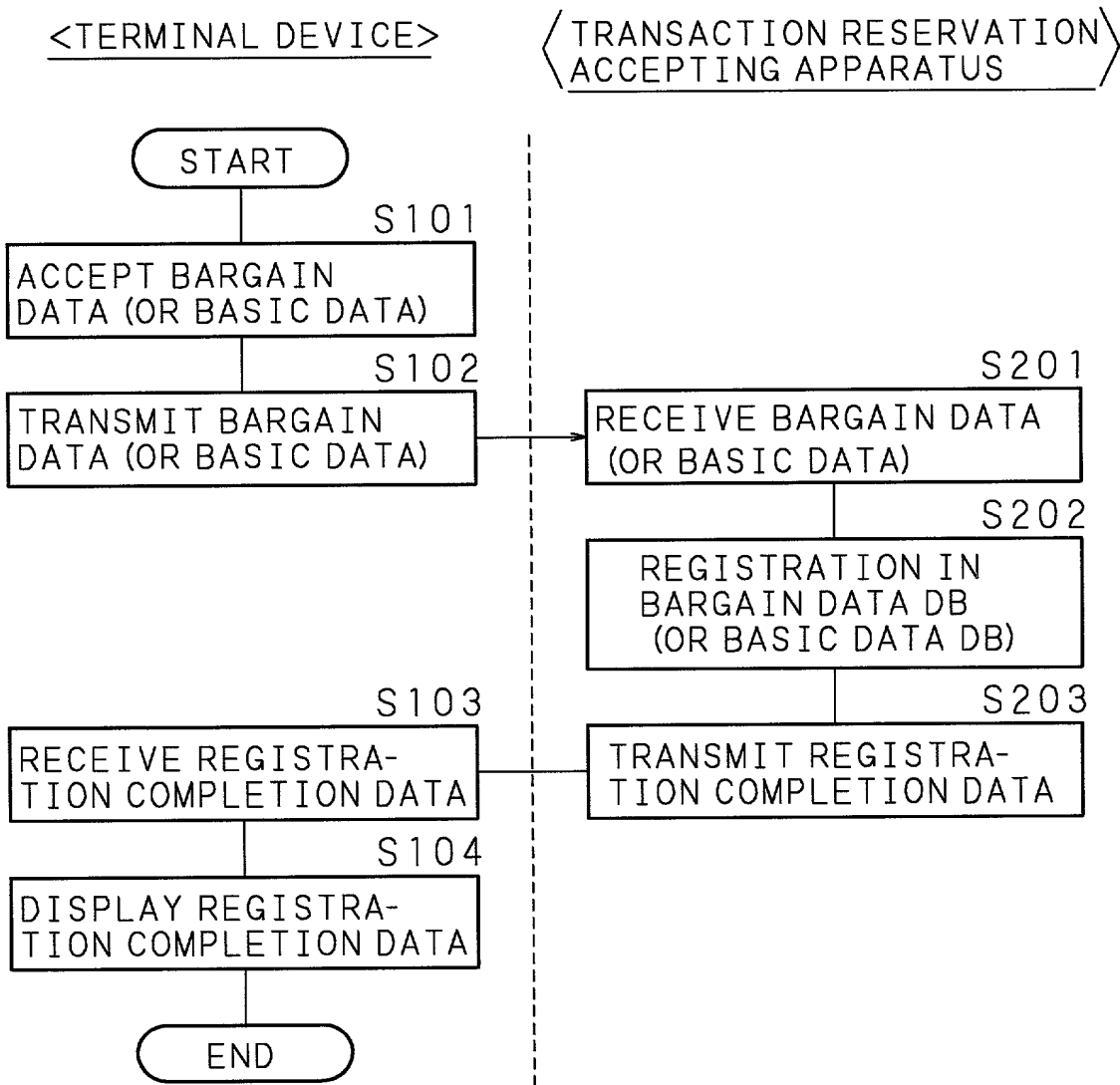




FIG. 8

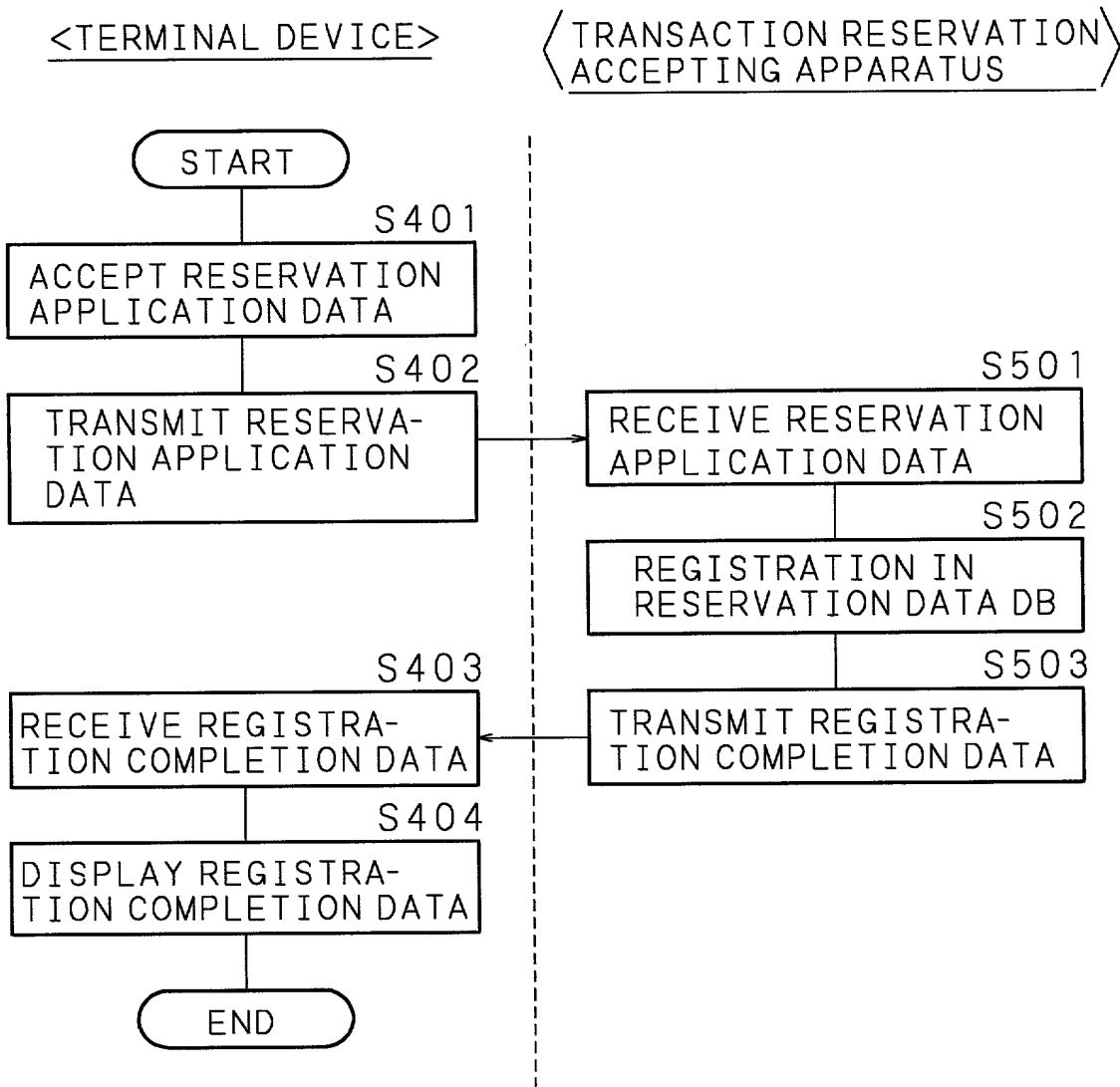


FIG. 9

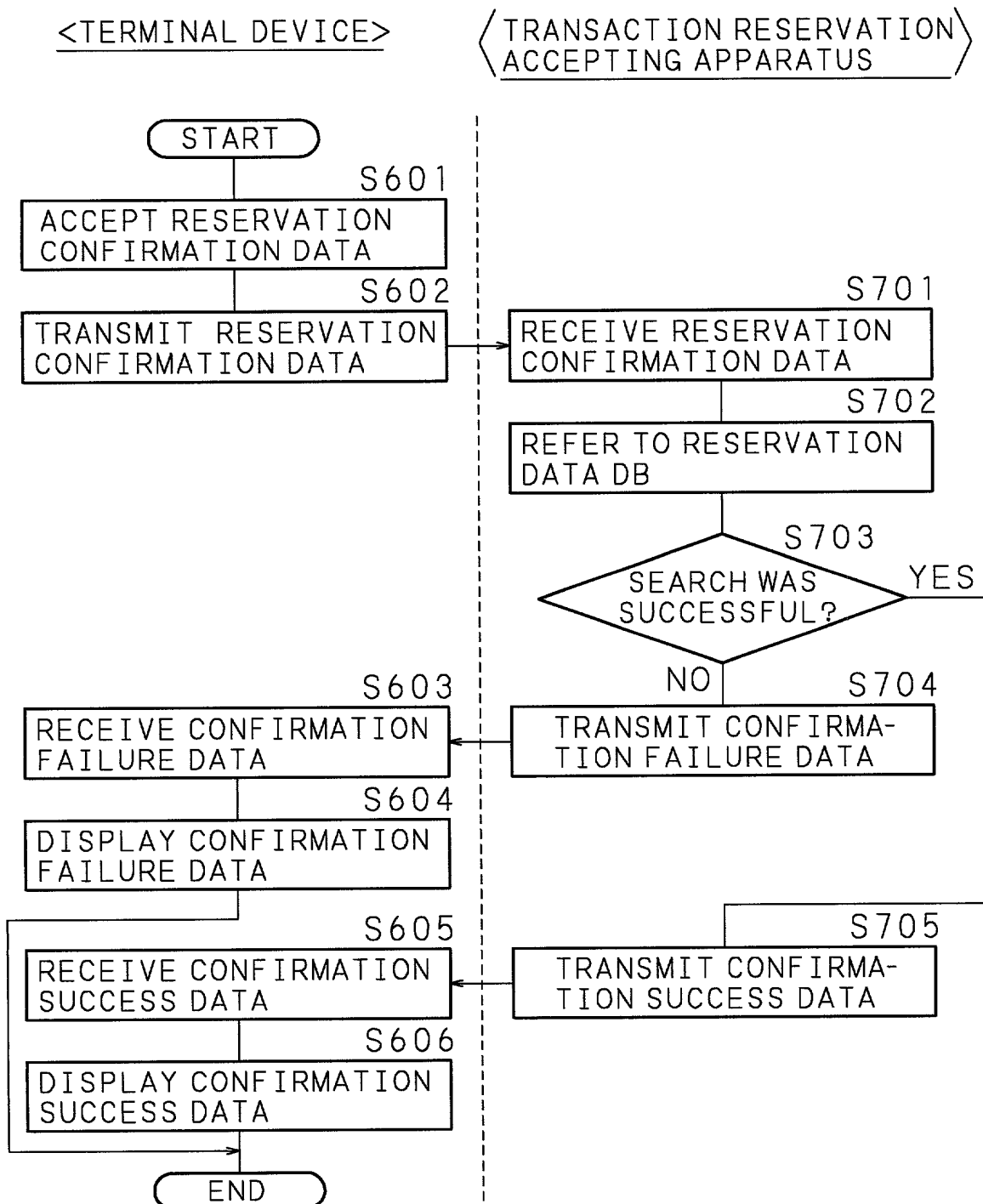




FIG. 10

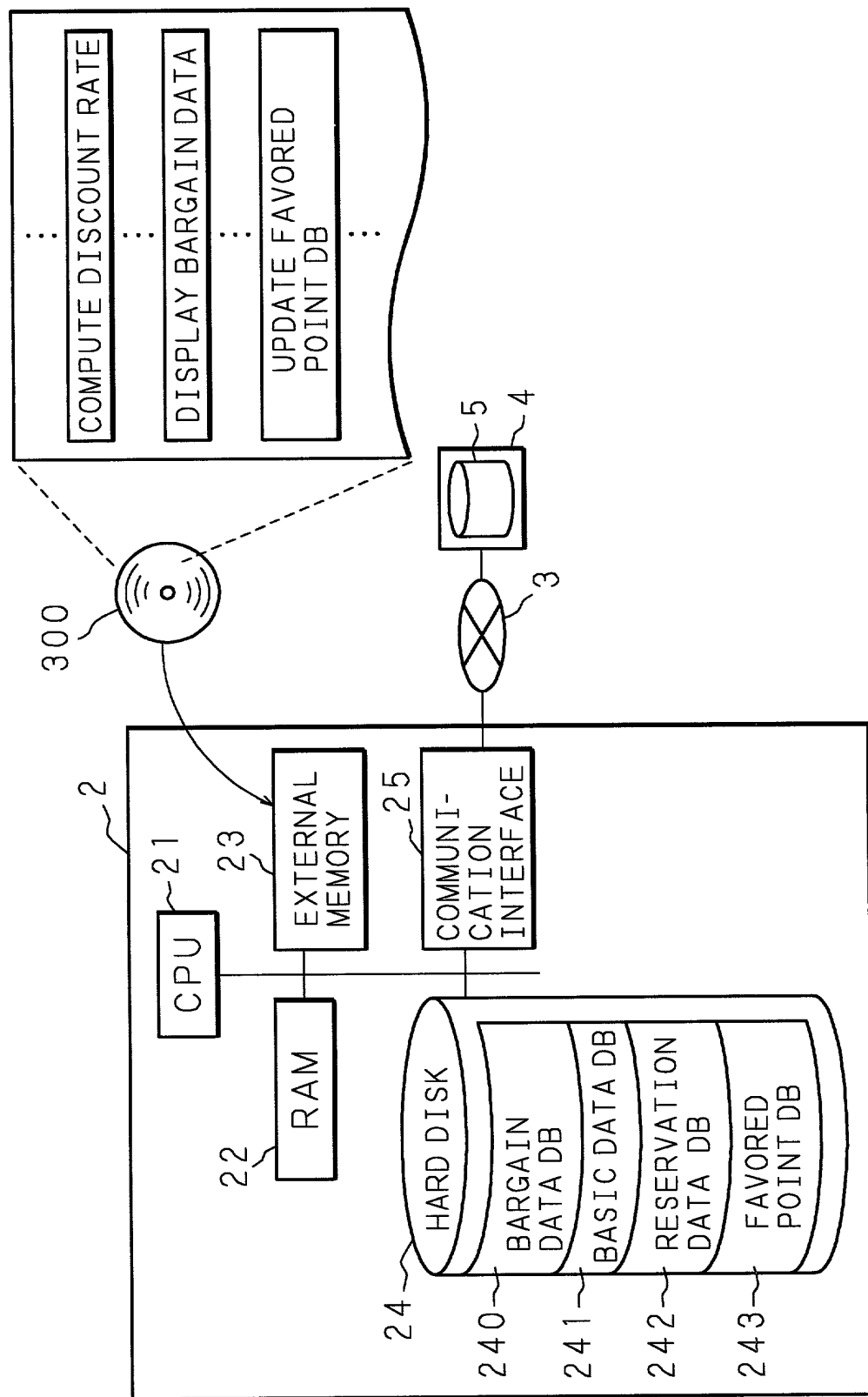


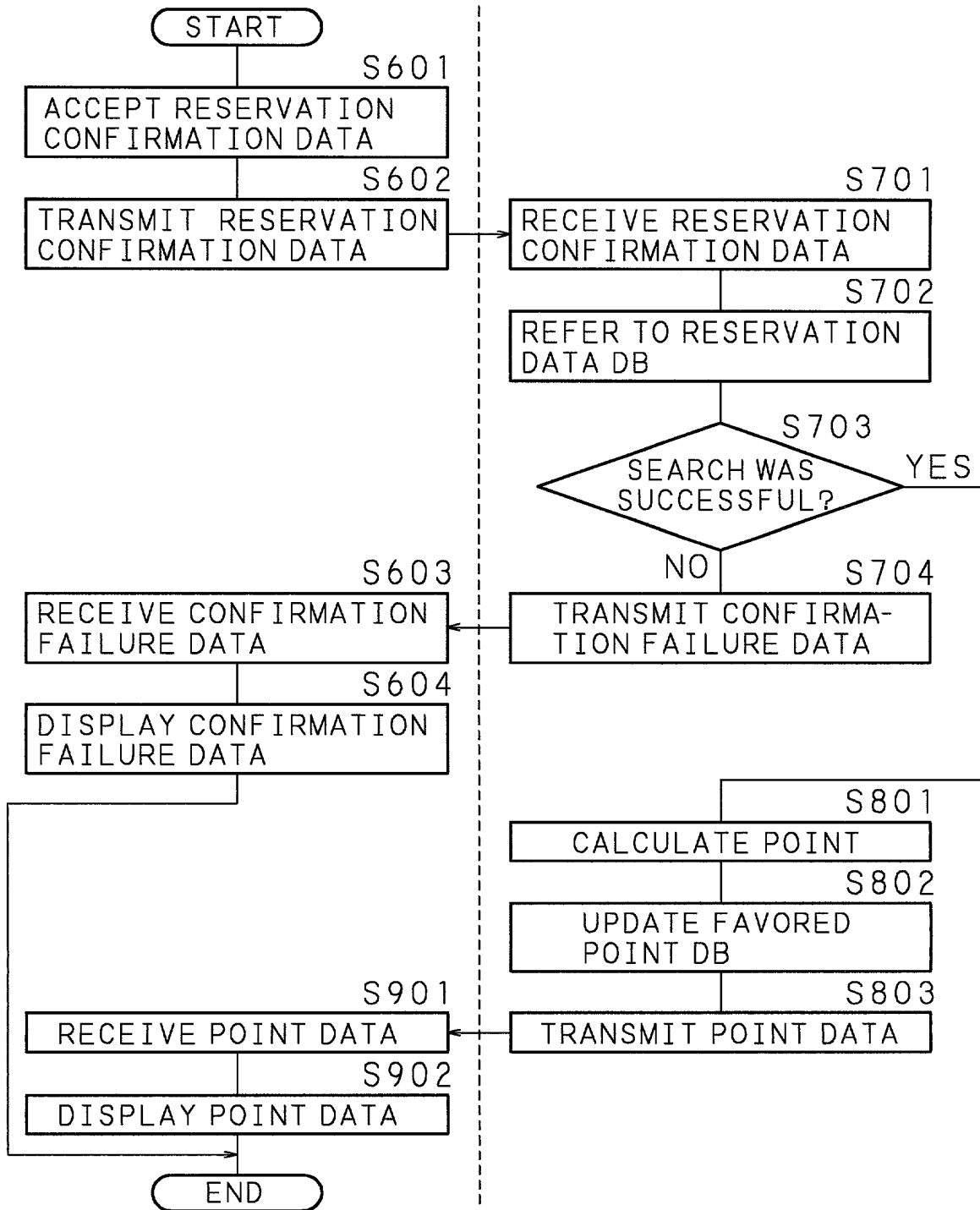
FIG. 11

43a CUSTOMER ID	43b SHOP ID	43c POINT
123456	A	500
333333	B	196
⋮	⋮	⋮

FIG. 12

<TERMINAL DEVICE>

<TRANSACTION RESERVATION  
ACCEPTING APPARATUS>



## Declaration and Power of Attorney For Patent Application

## 特許出願宣言書及び委任状

## Japanese Language Declaration

## 日本語宣言書

下記の氏名の発明者として、私は以下の通り宣言します。

As a below named inventor, I hereby declare that:

私の住所、私書箱、国籍は下記の私の氏名の後に記載された通りです。

My residence, post office address and citizenship are as stated next to my name.

下記の名称の発明に関して請求範囲に記載され、特許出願している発明内容について、私が最初かつ唯一の発明者（下記の氏名が一つの場合）もしくは最初かつ共同発明者であると（下記の名称が複数の場合）信じています。

I believe I am the original, first and sole inventor (if only one name is listed below) or an original, first and joint inventor (if plural names are listed below) of the subject matter which is claimed and for which a patent is sought on the invention entitled

METHOD, SYSTEM, AND APPARATUS FOR

ACCEPTING TRANSACTION RESERVATION,

AND RECORDING MEDIUM

上記発明の明細書（下記の欄でx印がついていない場合は、本書に添付）は、

the specification of which is attached hereto unless the following box is checked:

☐ 月 日に提出され、米国出願番号または特許協定条約国際出願番号を \_\_\_\_\_ とし、  
（該当する場合） \_\_\_\_\_ に訂正されました。

☐ was filed on \_\_\_\_\_  
as United States Application Number or  
PCT International Application Number  
\_\_\_\_\_ and was amended on  
\_\_\_\_\_ (if applicable).

私は、特許請求範囲を含む上記訂正後の明細書を検討し、内容を理解していることをここに表明します。

I hereby state that I have reviewed and understand the contents of the above identified specification, including the claims, as amended by any amendment referred to above.

私は、連邦規則法典第37編第1条56項に定義されるとおり、特許資格の有無について重要な情報を開示する義務があることを認めます。

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### Prior Foreign Application(s)

外国での先行出願

2000-074889	Japan
(Number)	(Country)
(番号)	(国名)
(Number)	(Country)
(番号)	(国名)

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(Application No.)	(Filing Date)
(出願番号)	(出願日)

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(Application No.)	(Filing Date)
(出願番号)	(出願日)
(Application No.)	(Filing Date)
(出願番号)	(出願日)

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Priority Not Claimed  
優先権主張なし

16/03/2000
(Day/Month/Year Filed)
(出願年月日)
(Day/Month/Year Filed)
(出願年月日)

I hereby claim the benefit under Title 35, United States Code, Section 119(e) of any United States provisional application(s) listed below.

(Application No.)	(Filing Date)
(出願番号)	(出願日)

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(Status: Patented, Pending, Abandoned)
(現況: 特許許可済、係属中、放棄済)
(Status: Patented, Pending, Abandoned)
(現況: 特許許可済、係属中、放棄済)

I hereby declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United States Code and that such willful false statements may jeopardize the validity of the application or any patent issued thereon.

## Japanese Language Declaration

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委任状: 私は下記の発明者として、本出願に関する一切の手続きを米特許商標局に対して遂行する弁理士または代理人として、下記の者を指名いたします。(弁護士、または代理人の氏名及び登録番号を明記のこと)

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(第三以降の共同発明者についても同様に記載し、署名をすること)

(Supply similar information and signature for third and subsequent joint inventors.)